CLAIMS

WHAT IS CLAIMED IS:

1.   A biometric device configured to receive a nonce, to receive biometric data, and to transmit the biometric data and the nonce.

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2.   The biometric device of claim 1 further configured to encrypt the biometric data using the nonce and to transmit only the encrypted biometric data and the nonce.

3.   The biometric device of claim 1 further configured to receive a secret, to store the secret, and to transmit at least an indication of the secret with the biometric data.

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4.   The biometric device of claim 3 configured to encrypt the biometric data using only the secret and to transmit only the encrypted biometric data and the nonce.

15   5.   The biometric device of claim 4, further configured to encrypt the biometric data using the secret and the nonce.

6.   The biometric device of claim 5 further configured with a GUID, wherein the biometric device is further configured to encrypt the biometric data using the GUID, the

20   secret, and the nonce.

7.   The biometric device of claim 3, wherein the secret comprises a system GUID.

8.   The biometric device of claim 1, wherein the nonce further comprises a random

25   number.

9.   The biometric device of claim 1 further configured to receive the biometric data in response to receiving the nonce.

5   10.   The biometric device of claim 9 further configured to receive the biometric data only in response to receiving the nonce.

11.   The biometric device of claim 1, wherein the biometric data are taken from the group consisting of: a fingerprint or thumbprint, hand geometry, voiceprint, retinal scan, facial scan, body odor, ear shape, DNA profile, keystroke dynamics, pen stroke dynamics, and vein checking.

12.   The biometric device of claim 1 further configured with a GUID, wherein the biometric device is further configured to encrypt the biometric data using the GUID and to transmit only the encrypted data and the nonce.

13.   The biometric device of claim 12 further configured to encrypt the biometric data using the GUID and the nonce.

20   14.   A computer system, comprising:

a biometric device configured to receive a nonce, to receive biometric data, and to transmit the biometric data and the nonce; and

a master device configured to provide the nonce to the biometric device and to receive the biometric data and the nonce from the biometric device.

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15.   The computer system of claim 14, wherein the biometric device is further configured to encrypt the biometric data using the nonce and to transmit only the encrypted biometric data and the nonce; and wherein the master device is further configured to receive the encrypted biometric data and the nonce from the biometric device and to decrypt the

5   encrypted biometric data using the nonce.

16.   The computer system of claim 14, wherein the biometric device is further configured to receive a secret, to store the secret, and to transmit at least an indication of the secret with the biometric data; and wherein the master device is further configured to receive at least the

10   indication of the secret from the biometric device and to authenticate the biometric data as being from the biometric device using at least the indication of the secret.

17.   The computer system of claim 16, wherein the biometric device is configured to encrypt the biometric data using only the secret and to transmit only the encrypted biometric

15   data and the nonce; and wherein the wherein the master device is further configured to receive the encrypted biometric data and the nonce from the biometric device and to decrypt the encrypted biometric data using the secret.

18.   The computer system of claim 17, wherein the biometric device is further configured

20   to encrypt the biometric data using the secret and the nonce; and wherein the master device is further configured to receive the encrypted biometric data and the nonce from the biometric device and to decrypt the encrypted biometric data using the secret and the nonce.

19.   The computer system of claim 18, wherein the biometric device is further configured with a GUID, wherein the biometric device is further configured to encrypt the biometric data using the GUID, the secret, and the nonce.

5   20.   The computer system of claim 16, wherein the secret comprises a system GUID.

21.   The computer system of claim 14, wherein the nonce further comprises a random number.

10   22.   The computer system of claim 22, wherein the biometric device is further configured to receive the biometric data in response to receiving the nonce.

23.   The computer system of claim 16, wherein the biometric device is further configured to receive the biometric data only in response to receiving the nonce.

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24.   The computer system of claim 10, wherein the biometric data are taken from the group consisting of: a fingerprint or thumbprint, hand geometry, voice print, retinal scan, facial scan, body odor, ear shape, DNA profile, keystroke dynamics, pen stroke dynamics, and vein checking.

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25.   The computer system of claim 10, wherein the master device includes a processor, a north bridge, or a south bridge.

26.   The computer system of claim 14, wherein the biometric device is further configured with a GUID, wherein the biometric device is further configured to encrypt the biometric data using the GUID and to transmit only the encrypted data and the nonce.

5   27.   The computer system of claim 26 wherein the biometric device is further configured to encrypt the biometric data using the GUID and the nonce.

28.   A method, comprising:

providing a nonce;

10   receiving biometric data; and

transmitting the biometric data and the nonce.

authenticating the biometric data using the nonce.

29.   The method of claim 28, further comprising:

15   encrypting the biometric data;

wherein transmitting the biometric data and the nonce comprises transmitting only the encrypted biometric data and the nonce;

receiving the encrypted biometric data and the nonce; and

decrypting the encrypted biometric data.

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30.   The method of claim 29,

wherein encrypting the biometric data comprises encrypting the biometric data using the nonce; and

wherein decrypting the encrypted biometric data comprises decrypting the encrypted

25   biometric data using the nonce.

31. The method of claim 29, further comprising:

receiving a secret;

storing the secret;

5   transmitting at least an indication of the secret with the biometric data;

receiving at least the indication of the secret; and

authenticating the biometric data using at least the indication of the secret.

32. The method of claim 31,

10   wherein encrypting the biometric data comprises encrypting the biometric data using the

secret; and

wherein decrypting the encrypted biometric data comprises decrypting the encrypted

biometric data using the secret.

15   33. The method of claim 32,

wherein encrypting the biometric data using the secret comprises encrypting the biometric

data using the secret and the nonce; and

wherein decrypting the encrypted biometric data using the secret comprises decrypting the

encrypted biometric data using the secret and the nonce.

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34. The method of claim 33, further comprising:

providing a GUID;

wherein encrypting the biometric data using the secret and the nonce comprises encrypting

the biometric data using the GUID, the secret, and the nonce; and

wherein decrypting the encrypted biometric data using the secret and the nonce comprises

decrypting the encrypted biometric data using the GUID, the secret, and the nonce.

35.   The method of claim 31, wherein the secret comprises a system GUID,

5   wherein receiving a secret comprises receiving the system GUID;

wherein storing the secret comprises storing the system GUID;

wherein transmitting at least the indication of the secret with the biometric data comprises

transmitting at least the indication of the system GUID with the biometric data;

wherein receiving at least the indication of the secret comprises receiving at least the

10   indication of the system GUID; and

wherein authenticating the biometric data using at least the indication of the secret comprises

authenticating the biometric data using at least the indication of the system GUID.

36.   The method of claim 35,

15   wherein encrypting the biometric data comprises encrypting the biometric data using the

system GUID; and

wherein decrypting the encrypted biometric data comprises decrypting the encrypted

biometric data using the system GUID.

20   37.   The method of claim 36,

wherein encrypting the biometric data using the system GUID comprises encrypting the

biometric data using the system GUID and the nonce; and

wherein decrypting the encrypted biometric data using the system GUID comprises

decrypting the encrypted biometric data using the system GUID and the nonce.

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38.   The method of claim 28, further comprising:

receiving a secret;

storing the secret;

transmitting at least an indication of the secret with the biometric data;

5   receiving at least the indication of the secret; and

authenticating the biometric data using at least the indication of the secret.

39.   The method of claim 28, wherein receiving the biometric data occurs in response to

providing the nonce.

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40.   The method of claim 39, wherein receiving the biometric data occurs only in response

to providing the nonce.

41.   The method of claim 28, further comprising:

15   providing a GUID;

encrypting the biometric data using the GUID;

wherein transmitting the biometric data and the nonce comprises transmitting only the

encrypted biometric data and the nonce;

receiving the encrypted biometric data and the nonce; and

20   decrypting the encrypted biometric data using the GUID.

42.   The method of claim 41,

wherein encrypting the biometric data using the GUID comprises encrypting the biometric

data using the GUID and the nonce; and

wherein decrypting the encrypted biometric data using the GUID comprises decrypting the

encrypted biometric data using the GUID and the nonce.

43. A method, comprising:

5   providing a random number;

receiving biometric data; and

transmitting the biometric data and the random number.

authenticating the biometric data using the random number.

10   44. The method of claim 43, further comprising:

encrypting the biometric data;

wherein transmitting the biometric data and the random number comprises transmitting only

the encrypted biometric data and the random number;

receiving the encrypted biometric data and the random number; and

15   decrypting the encrypted biometric data.

45. The method of claim 44,

wherein encrypting the biometric data comprises encrypting the biometric data using the

random number; and

20   wherein decrypting the encrypted biometric data comprises decrypting the encrypted

biometric data using the random number.

46. The method of claim 44, further comprising:

receiving a secret;

25   storing the secret;

transmitting at least an indication of the secret with the biometric data;

receiving at least the indication of the secret; and

authenticating the biometric data using at least the indication of the secret.

5   47.   The method of claim 46,

wherein encrypting the biometric data comprises encrypting the biometric data using the

secret; and

wherein decrypting the encrypted biometric data comprises decrypting the encrypted

biometric data using the secret.

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48.   The method of claim 47,

wherein encrypting the biometric data using the secret comprises encrypting the biometric

data using the secret and the random number; and

wherein decrypting the encrypted biometric data using the secret comprises decrypting the

15   encrypted biometric data using the secret and the random number.

49.   The method of claim 48, further comprising:

providing a GUID;

wherein encrypting the biometric data using the secret and the random number comprises

20   encrypting the biometric data using the GUID, the secret, and the random number;

and

wherein decrypting the encrypted biometric data using the secret and the random number

comprises decrypting the encrypted biometric data using the GUID, the secret, and the

random number.

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50.   The method of claim 46, wherein the secret comprises a system GUID,

wherein receiving a secret comprises receiving the system GUID;

wherein storing the secret comprises storing the system GUID;

wherein transmitting at least the indication of the secret with the biometric data comprises

5   transmitting at least the indication of the system GUID with the biometric data;

wherein receiving at least the indication of the secret comprises receiving at least the

indication of the system GUID; and

wherein authenticating the biometric data using at least the indication of the secret comprises

authenticating the biometric data using at least the indication of the system GUID.

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51.   The method of claim 50,

wherein encrypting the biometric data comprises encrypting the biometric data using the

system GUID; and

wherein decrypting the encrypted biometric data comprises decrypting the encrypted

15   biometric data using the system GUID.

52.   The method of claim 51,

wherein encrypting the biometric data using the system GUID comprises encrypting the

biometric data using the system GUID and the random number; and

20   wherein decrypting the encrypted biometric data using the system GUID comprises

decrypting the encrypted biometric data using the system GUID and the random

number.

53.   The method of claim 43, further comprising:

25   receiving a secret;

storing the secret;

transmitting at least an indication of the secret with the biometric data;

receiving at least the indication of the secret; and

authenticating the biometric data using at least the indication of the secret.

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54.   The method of claim 43, wherein receiving the biometric data occurs in response to

providing the random number.

55.   The method of claim 54, wherein receiving the biometric data occurs only in response

10   to providing the random number.

56.   The method of claim 43, further comprising:

providing a GUID;

encrypting the biometric data using the GUID;

15   wherein transmitting the biometric data and the random number comprises transmitting only

the encrypted biometric data and the random number;

receiving the encrypted biometric data and the random number; and

decrypting the encrypted biometric data using the GUID.

20   57.   The method of claim 56,

wherein encrypting the biometric data using the GUID comprises encrypting the biometric

data using the GUID and the random number; and

wherein decrypting the encrypted biometric data using the GUID comprises decrypting the

encrypted biometric data using the GUID and the random number.

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58.   A method for operating a computer system including a biometric device and a master

device, the method comprising:

the master device providing a nonce;

the biometric device receiving biometric data; and

5   the biometric device transmitting the biometric data and the nonce to the master device.

59.   The method of claim 58, further comprising:

the biometric device encrypting the biometric data;

wherein the biometric device transmitting the biometric data and the nonce to the master

10   device comprises the biometric device transmitting only the encrypted biometric data

and the nonce to the master device;

the master device receiving the encrypted biometric data and the nonce from the biometric

device; and

the master device decrypting the encrypted biometric data.

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60.   The method of claim 59,

wherein the biometric device encrypting the biometric data comprises the biometric device

encrypting the biometric data using the nonce; and

wherein the master device decrypting the encrypted biometric data comprises the master

20   device decrypting the encrypted biometric data using the nonce.

61.   The method of claim 59, further comprising:

the biometric device receiving a secret;

the biometric device storing the secret;

the biometric device transmitting at least an indication of the secret with the biometric data to

the master device;

the master device receiving at least the indication of the secret from the biometric device; and

the master device authenticating the biometric data using at least the indication of the secret.

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62.   The method of claim 61,

wherein the biometric device encrypting the biometric data comprises the biometric device

encrypting the biometric data using the secret; and

wherein the master device decrypting the encrypted biometric data comprises the master

device decrypting the encrypted biometric data using the secret.

63.   The method of claim 62,

wherein the biometric device encrypting the biometric data using the secret comprises the

biometric device encrypting the biometric data using the secret and the nonce; and

wherein the master device decrypting the encrypted biometric data using the secret comprises

the master device decrypting the encrypted biometric data using the secret and the

nonce.

64.   The method of claim 63, further comprising:

20   providing a GUID from the biometric device to the master device;

wherein the biometric device encrypting the biometric data using the secret and the nonce

comprises the biometric device encrypting the biometric data using the GUID, the

secret, and the nonce; and

wherein the master device decrypting the encrypted biometric data using the secret and the nonce comprises the master device decrypting the encrypted biometric data using the GUID, the secret, and the nonce.

5   65.   The method of claim 61, wherein the secret comprises a system GUID,

wherein the biometric device receiving a secret comprises the biometric device receiving the system GUID;

wherein the biometric device storing the secret comprises the biometric device storing the system GUID;

10   wherein the biometric device transmitting at least the indication of the secret with the biometric data to the master device comprises the biometric device transmitting at least the indication of the system GUID with the biometric data to the master device;

wherein the master device receiving at least the indication of the secret from the biometric device comprises receiving at least the indication of the system GUID from the

15   biometric device; and

wherein the master device authenticating the biometric data using at least the indication of the secret comprises the master device authenticating the biometric data using at least the indication of the system GUID.

20   66.   The method of claim 65,

wherein the biometric device encrypting the biometric data comprises the biometric device encrypting the biometric data using the system GUID; and

wherein the master device decrypting the encrypted biometric data comprises the master device decrypting the encrypted biometric data using the system GUID.

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67. The method of claim 66,

wherein the biometric device encrypting the biometric data using the system GUID comprises the biometric device encrypting the biometric data using the system GUID and the nonce; and

5   wherein the master device decrypting the encrypted biometric data using the system GUID comprises the master device decrypting the encrypted biometric data using the system GUID and the nonce.

68. The method of claim 58, further comprising:

10   the biometric device receiving a secret;

the biometric device storing the secret;

the biometric device transmitting at least an indication of the secret with the biometric data to the master device;

the master device receiving at least the indication of the secret from the biometric device; and

15   the master device authenticating the biometric data using at least the indication of the secret.

69. The method of claim 58, wherein the biometric device receiving the biometric data occurs in response to the master device providing the nonce to the biometric device.

20   70. The method of claim 69, wherein the biometric device receiving the biometric data occurs only in response to the master device providing the nonce to the biometric device.

71. The method of claim 58, wherein the biometric data are taken from the group

25   consisting of: a fingerprint or thumbprint, hand geometry, voice print, retinal scan, facial

scan, body odor, ear shape, DNA profile, keystroke dynamics, pen stroke dynamics, and vein checking, the method further comprising:

the master device providing the nonce;

the biometric device receiving the biometric data; and

5   the biometric device transmitting the biometric data and the nonce to the master device.

72.   The method of claim 58, wherein the master device is selected from the group consisting of a processor, a bridge, a north bridge, a south bridge, and a motherboard, the method further comprising:

10   the master device providing the nonce;

the biometric device receiving the biometric data; and

the biometric device transmitting the biometric data and the nonce to the master device.

73.   The method of claim 58, further comprising:

15   providing a GUID from the biometric device to the master device;

the biometric device encrypting the biometric data using the GUID;

wherein the biometric device transmitting the biometric data and the nonce to the master device comprises the biometric device transmitting only the encrypted biometric data and the nonce to the master device;

20   the master device receiving the encrypted biometric data and the nonce from the biometric device; and

the master device decrypting the encrypted biometric data using the GUID.

74.   The method of claim 73,

wherein the biometric device encrypting the biometric data using the GUID comprises the

biometric device encrypting the biometric data using the GUID and the nonce; and

wherein the master device decrypting the encrypted biometric data using the GUID comprises

the master device decrypting the encrypted biometric data using the GUID and the

5   nonce.

75.   A system, comprising:

means for providing a nonce;

means for receiving biometric data; and

10   means for transmitting the biometric data and the nonce; and

means for authenticating the biometric data using the nonce.

76.   The system of claim 75, further comprising:

means for encrypting the biometric data;

15   wherein the means for transmitting the biometric data and the nonce comprise means for

transmitting only the encrypted biometric data and the nonce;

means for receiving the encrypted biometric data and the nonce; and

means for decrypting the encrypted biometric data.

20   77.   The system of claim 76,

wherein the means for encrypting the biometric data comprise means for encrypting the

biometric data using the nonce; and

wherein the means for decrypting the encrypted biometric data comprise means for

decrypting the encrypted biometric data using the nonce.

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78. A system, comprising:

means for providing a random number;

means for receiving biometric data; and

means for transmitting the biometric data and the random number; and

5   means for authenticating the biometric data using the random number.

79. The system of claim 78, further comprising:

means for encrypting the biometric data;

wherein the means for transmitting the biometric data and the random number comprise

10   means for transmitting only the encrypted biometric data and the random number;

means for receiving the encrypted biometric data and the random number; and

means for decrypting the encrypted biometric data.

80. The system of claim 79,

15 wherein the means for encrypting the biometric data comprise means for encrypting the

biometric data using the random number; and

wherein the means for decrypting the encrypted biometric data comprise means for

decrypting the encrypted biometric data using the random number.